

Table 2 illustrates the effect of the use of a compatibilizer (poly(2-ethyl-2-oxazoline), 2 parts) on the properties of soy protein/PLA blends:

Table 2
Effect of a Compatibilizer on Properties of Soy Protein/PLA Blends
(Medium Shear)

	CP (parts)	Strength MPa	σ_y MPa	P.E.Y. %	σ_b MPa	P.E.B. %	Modulus MPa	Water uptake %, 2 h
SPI	0	12.4±2.0	12.1±2.0	1.2±0.1	12.4±2.0	1.3±0.1	1502±16	13.2±1.6
	2	18.7±1.7	18.5±1.8	1.8±0.2	18.7±1.7	1.8±0.2	1454±42	14.1±1.8
SPC	0	19.3±0.6	19.0±0.9	1.7±0.1	19.3±0.6	1.7±0.1	1676±83	15.1±1.0
	2	19.5±0.3	19.2±1.6	1.7±0.1	19.5±0.3	1.8±0.1	1611±116	17.2±1.3
SF	0	12.8±0.3	12.7±0.3	2.4±0.2	12.8±0.3	2.5±0.2	805±30	12.5±0.5
	2	14.8±0.3	14.7±0.3	2.5±0.1	14.8±0.3	2.5±0.2	864±25	10.7±0.4

SPI, SPC, SF: soy protein isolate, concentrate, and soy flour, respectively.

Glycerol was used as a plasticizer.

PLA: poly(lactic acid)

CP: compatibilizer, poly(2-ethyl-2-oxazoline)

σ_y : stress at yield point

σ_b : stress at break point

P.E.Y.: percentage elongation at yield point

P.E.B.: percentage elongation at break point